

# ONE NEW SPECIES OF THE GENUS *ERGATETTIX* KIRBY (ORTHOPTERA, TETRIGOIDEA, TETRIGIDAE) FROM CHINA

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**Abstract** This paper reports one new species of the genus *Ergatettix* Kirby from Guangxi, China. A key to species of *Ergatettix* from China is presented.

**Key words** Orthoptera, Tetrigoidea, Tetrigidae, *Ergatettix*, new species, China.

The genus *Ergatettix* was erected by Kirby in 1914 and currently includes 17 species (Kirby, 1914; Günther, 1937; Blackith, 1992; Shishodia, 1991; Ingrisch, 2001; Zheng, 2005). The type species of the genus is *Ergatettix dorsiferus* (Walker, 1871). The genus is mainly distributed in India, Bangladesh, Sri Lanka, Turkmenia, Indonesia, Nepal, China, Greater Sundar Island. The present paper describes a new species of the genus from Guangxi of China, and a key to species of the genus from China are presented. The holotype is deposited in the Institute of Zoology, Shaanxi Normal University. The paratypes are deposited in the Institute of Zoology, Shaanxi Normal University, China (2 ♂, 4 ♀) and Department of Chemistry and Life Science, Hechi University, China (1 ♂, 1 ♀).

## *Ergatettix* Kirby, 1914

*Ergatettix* Kirby, 1914. Fauna Brit. India Orth. p. 69; Günther, 1937. Treubia, 175; B.-Bienko, 1951. Acridoidea of USSR and adjacent countries, Vol. 1. 106; Podgornaya, 1983. Tetrigidae (Orthoptera) of USSR, p. 82; Jiang & Zheng, 1998. Grasshoppers and Locusts from Guangxi. 358; Liang & Zheng, 1998. Fauna Sinica, Insecta Vol. 12, Orth. Tetrigoidea. 218; Zheng, 2005. Fauna of Tetrigoidea from Western China, 421; Deng, Zheng and Wei, 2007. Fauna of Tetrigoidea from Yunnan and Guangxi, 378.

*Indatettix* Hancock, 1915. Rev. Ind. Mus., 11: 130.

Type species: *Ergatettix dorsiferus* (Walker, 1871) (= *Tettix dorsiferus* Walker, 1871)

**Diagnosis.** Head distinctly exerted above the surface of pronotum, vertex much narrower than one of the eyes, median carinula distinct. In profile, frontal costa arcuate only between antennae, declivous in front. Antennae filiform, inserted below the eyes. Eyes globular, strongly exerted above the pronotal surface, paired ocelli placed below the middle of eyes.

Anterior margin of pronotum truncate, midkeel of pronotum completed, upper margin of pronotum undulated in profile. Posterior margin of pronotum narrow, long cone-shaped, surpassing or not reaching the apex of hind femora. Posterior margins of lateral

lobes of pronotum with two concavities, posterior angles of lateral lobes of pronotum turned downwards, generally round at apex. Tegmina long oval, apex rounded. Hind wings developed, surpassing or not reaching the apex of pronotum. Width of midfemur not narrower than the width of tegmina, lower margins of middle femora undulated, mid tibia constricted at apex, outer side of hind femur with clear protuberent tubercles or node projections. Length of the first segment of hind tarsi longer than third.

## Key to species of *Ergatettix* Kirby from China

1. Hind process of pronotum very long, almost extended upto the apex of hind tibia; lower margin of midfemur with dense hair ..... 2  
Hind process of pronotum shorter, not extended upto the apex of hind femur or abdomen; lower margin of midfemur with sparse hair ..... 3
2. Width of vertex slightly narrower than width of an eye; antennae inserted under the lower margin of eyes; upper margin of pronotum wave like in profile; with a pair short longitudinal keels between shoulders .....  
..... *Ergatettix dorsiferus* (Walker, 1871)  
Width of vertex distinctly narrower than width of an eye (1: 2); antennae inserted the lower margin of eyes; upper margin of pronotum straight in profile; without a pair short longitudinal keels between shoulders ..... *Ergatettix albostriatus* Zheng et Li, 2001
3. Hind wing shorter, only reaching the middle of hind femur; ovipositor long and slender, length of dorsal ovipositor valves 5.4 times its width .....  
..... *Ergatettix brachyptera* Zheng, 1992  
Hind wing longer, reaching top of hind femur or hind process; ovipositor short and stout, length of dorsal ovipositor valves 2.0-2.7 times its width ..... 4
4. Width of vertex narrower than the width of an eye, lateral keels of prozona constructed backward, lower margins of middle femora straight, midkeel of upper side of hind femur with large teeth .....  
..... *Ergatettix serrifemora* sp. nov.  
Width of vertex equal to the width of an eye, lateral keels of prozona parallel, lower margins of middle femora undulated, midkeel of upper side of hind femur without large teeth .....  
..... *Ergatettix brachynotus* Zheng et Liang, 1993

*Ergatettix serrifemora* sp. nov. (Figs 1-4)

Measurements. Length of body ♂6.5-6.7 mm, ♀8.0-8.5 mm; length of pronotum ♂5.5-5.7 mm, ♀6.5-6.8 mm; length of hind femur ♂4.0-4.2 mm, ♀4.5-4.7 mm.

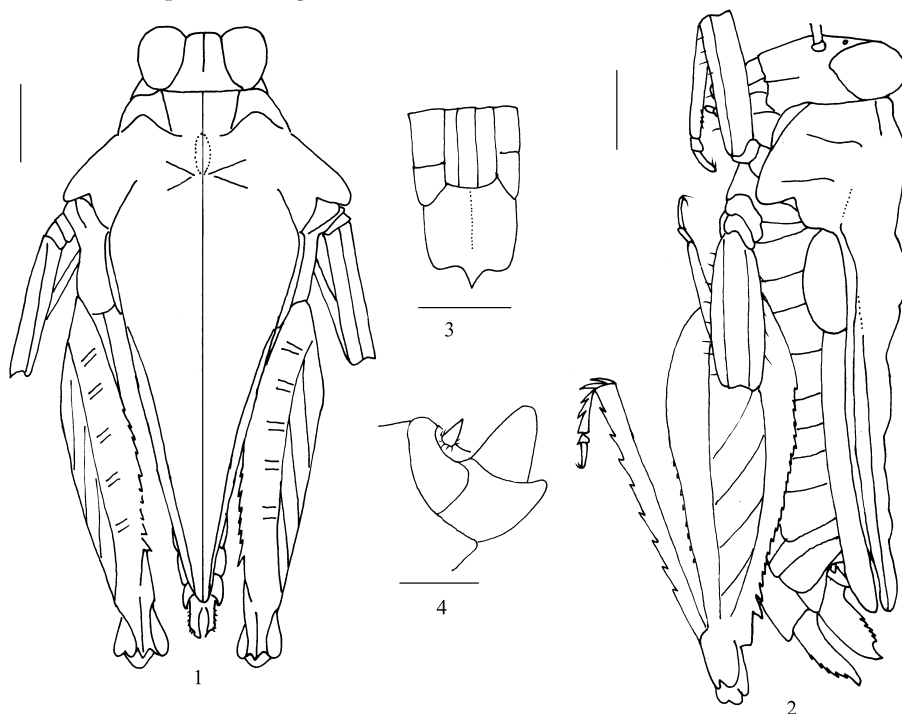
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Female. Body small, stout. Head distinctly exerted above the pronotal surface, width of vertex narrower than the width of an eye, anterior margin of vertex straight, not protruding beyond eyes, median carina conspicuous. In profile, frontal costa arcuate only between antennae, width of longitudinal furrow equal to width of first segment of antennae. Antenna filiform, 15-segmented, length of a segment in middle about 6-7 times longer than width, inserted below the eyes. Eyes globose, strongly exerted above the pronotal surface, paired ocelli placed below the middle of eyes.

Anterior margin of pronotum truncate, midkeel of pronotum completed, upper margin of pronotum undulated in profile. Disc of pronotum with numerous small tubercles, lateral keels of prozona constructed backward, humeral angle arcuate, without a pair short longitudinal keels between shoulder. Posterior margin of pronotum narrow, short cone-shaped, just reaching the knee of hind femora. Posterior margins of lateral lobes of pronotum with two concavities, posterior angles of lateral

lobes of pronotum turned downwards, apex of angles round. Tegmina long, ovate, apex rounded. Hind wings developed, reaching or slightly surpassing top of hind process of pronotum. Upper and lower margins of anterior and middle femora straight and omate with sparse hairs, width of midfemur wider than that of tegmina. Middle tibia narrowed toward end. Hind femur 2.5 times longer than wide, midkeel of upper side of hind femur with large teeth, antegenicular large and right angle, genicular denticles acute. Outer side of dorsal margins of hind tibia with 8-9 spines, inner side with 6-7 spines. Length of the first segment of hind tarsi longer than the third, the third pulvillus longer than first and second, apices of all the pulvilli sharp. Ovipositor stout and short, length of dorsal ovipositor valves 2 times its width, dorsal and ventral valves with slender saw-like teeth. Length of subgenital plate equal to its width, middle of posterior margin of subgenital plate with a triangular convex.



Figs. 1-4. *Ergatettix serifenora* sp. nov. 1. Body of female, dorsal view. 2. Body of female, lateral view. 3. Subgenital plate of female, ventral view. 4. Subgenital plate of male, lateral view. Scale bars = 1 mm.

Body brown. Wings brown. Hind tibia brown.

Male. Body smaller than female, vertex distinctly narrower than an eye, subgenital plate short cone-shaped, apex sharp.

Holotype ♀, China, Guangxi, Luocheng (Baotan), 600 m, 29 Apr. 2006, coll. DENG Wei An. Paratypes: 3 ♂♂, 5 ♀♀, other data as holotype, coll. DENG Wei An and WEI Shi-Zhen.

Etymology. The species name is derived from the

Latin *seri* and *fenora*, meaning midkeel of upper side of hind femur with large teeth.

Remarks. This new species can be distinguished from *Ergatettix brachynotus* Zheng et Liang, 1993 by: 1) vertex narrower than an eye; 2) lateral keels of prozona constructed backward; 3) lower margins of middle femora straight and omate with sparse hairs; 4) midkeel of upper side of hind femur with large teeth.

Distribution. China (Guangxi).

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## 中国突眼蚱属一新种记述 (直翅目, 蚱总科, 蚱科)

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**摘要** 记述采自广西突眼蚱属 *Ergatettix* 1 新种, 即齿股突眼蚱 *Ergatettix serrifenora* sp. nov., 并编制了中国突眼蚱属的分种检索表。正模保存在陕西师范大学动物研究所标本室, 其它副模标本保存在陕西师范大学动物研究所标本室 (2 ♂♂, 4♀♀) 和河池学院动物标本室 (1 ♂♂, 1♀♀)。

**齿股突眼蚱, 新种** *Ergatettix serrifenora* sp. nov. (图 1~4)

**关键词** 直翅目, 蚱总科, 蚱科, 突眼蚱属, 新种, 中国。

**中图分类号** Q969.26

本种近似于短背突眼蚱 *Ergatettix brachynotus* Zheng et Liang, 1993, 主要区别为: 1) 头顶宽狭于 1 复眼; 2) 前胸背板沟前区侧隆线向后收缩; 3) 中足股节下缘平直; 4) 后足股节上侧中隆线具大锯齿, 膝前齿大。

正模 ♀, 广西罗城 (宝坛), 600 m, 2006-04-29, 邓维安采; 副模, 3 ♂♂ 5♀♀, 邓维安、韦仕珍采, 其它同正模。